

HT 98-002  
Serial Number 09/046,007

### **REMARKS**

Favorable reconsideration of this application in light of the following remarks is respectfully requested.

Claims 21-28 are pending in this application. No claims have been amended herein. No claims have been allowed.

### ***Claim Rejections***

1. The Examiner has provisionally rejected claims 21-28 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 and 5-21 of co-pending application serial number 09/046,008 (Attorney Docket Number HT 96-010C; hereinafter “the ‘008 application”) in view of Sato et al. (U.S. Patent No. 5,992,004; hereinafter “Sato”) and Choukh et al. (U.S. Patent No. 5,753,131; hereinafter “Choukh”).

2. The Examiner has provisionally rejected claims 21-28 under 35 U.S.C. § 103(a) as being unpatentable over the ‘008 application in view of Sato and Choukh.

3. The Examiner has rejected claims 21-28 under 35 U.S.C. § 103(a) as being unpatentable over Choukh in view of Sato.

Applicant acknowledges in general, but not necessarily with specificity, the teachings of the '008 application, Sato and Choukh as cited by the Examiner.

In response in a first instance, and with respect specifically to the rejection of claims 21-28: (1) provisionally under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the '008 application in view of Sato and Choukh; and (2) provisionally under 35 U.S.C. § 103(a) as being unpatentable over the '008 application in view of Sato and Choukh, applicant asserts that claims 21-28 may not properly be rejected: (1) provisionally under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the '008 application in view of Sato and Choukh; or (2) provisionally under 35 U.S.C. § 103(a) as being unpatentable over the '008 application in view of Sato and Choukh, insofar as the '008 application and the instant application were filed on the same date (i.e., 23 March 1998).

In that regard, if both the '008 application and the instant application were to issue as a pair of patents, the "right to exclude" would thus of necessity expire on the same day for the pair of patents since the corresponding pair of patent applications was filed on the same day. Similarly, there is thus with respect to the instant application in view of the '008 application no potential for improper timewise extension of the "right to exclude," and thus the judicially created doctrine of obviousness double patenting appears inapplicable. Similarly in that regard, since both the '008 application and the instant application were filed on the same day, applicant asserts that neither the '008 application nor the instant application, or any patent issuing therefrom, may properly be employed as prior art under 35 U.S.C. § 102(e) against the other of the '008 application or the instant application (MPEP 804, pg. 800-24, col. 1, second full paragraph (July

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1998 revision)) as asserted by the Examiner in conjunction with the Examiner's provisional rejection of claims 21-28 under 35 U.S.C. § 103(a) as being unpatentable over the '008 application in view of Sato and Choukh.

In light of the foregoing responses, applicant respectfully requests that the Examiner's rejection of claims 21-28: (1) provisionally under the judicially created doctrine of obviousness-type double patenting over the '008 application in view of Sato and Choukh; and (2) provisionally under 35 U.S.C. § 103(a) as being unpatentable over the '008 application in view of Sato and Choukh, be withdrawn.

In response in a second instance, and with respect more specifically to each of the foregoing three rejections of claims 21-28, applicant asserts that none of applicant's claims to applicant's invention may properly be: (1) provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over the '008 application in view of Sato and Choukh; (2) provisionally rejected under 35 U.S.C. § 103(a) as being unpatentable over the '008 application in view of Sato and Choukh; or (3) rejected under 35 U.S.C. § 103(a) as being unpatentable over Choukh in view of Sato, insofar as there is no suggestion or motivation to modify or combine Sato and Choukh, for reasons as cited by the Examiner.

In particular, applicant further asserts that such modification or combination of Sato with Choukh in a fashion as suggested by the Examiner would render Sato unsatisfactory for Sato's intended purpose. MPEP 2142, 2143, 2143.01.

Further in that regard, applicant asserts that since Sato, as cited by the Examiner,

clearly discloses Sato's magnetoresistive (MR) sensor element as a spin valve magnetoresistive (SVMR) sensor element, a substitution of Choukh's dielectric spacer layer which contacts and separates Choukh's pair of magnetoresistive (MR) layers within Choukh's soft adjacent layer (SAL) magnetoresistive (MR) sensor element for Sato's non-magnetic conductor spacer layer which contacts and separates Sato's pair of magnetoresistive (MR) layers within Sato's spin valve magnetoresistive (SVMR) sensor element, to thus provide applicant's disclosed and claimed soft adjacent layer (SAL) magnetoresistive (MR) sensor element, would render Sato's spin valve magnetoresistive (SVMR) sensor element unsatisfactory for Sato's intended purpose, since within a spin valve magnetoresistive (SVMR) sensor element in general, and within Sato's spin valve magnetoresistive (SVMR) sensor element in particular, it is required to employ a non-magnetic conductor spacer layer interposed between, separating and contacting a pair of magnetoresistive (MR) layers, and that incorporating instead interposed between, separating and contacting the pair of magnetoresistive (MR) layers a dielectric spacer layer the spin valve magnetoresistive (SVMR) sensor element would be rendered inoperable and unsatisfactory for its intended purpose.

Further in support of applicant's foregoing assertion, applicant has appended herewith a portion of Ashar (**Magnetic Disk Drive Technology**, IEEE Press, New York, NY (1997), pp 313-319). Applicant wishes in particular to bring the Examiner's attention to pg. 316, Fig. 11.5, which illustrates electron trajectories within an operable spin valve magnetoresistive (SVMR) sensor element. As is illustrated within Fig. 11.5, within the operable spin valve magnetoresistive (SVMR) sensor element electron trajectories cross a non-magnetic conductor spacer layer within the operable spin-valve magnetoresistive (SVMR) sensor element, and thus by substituting within a spin valve magnetoresistive (SVMR) sensor element, such as Sato's spin

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valve magnetoresistive (SVMR) sensor element, a dielectric spacer layer for the required non-magnetic conductor spacer layer the desired electron trajectories would be blocked due to the dielectric character of the dielectric spacer layer and thus the spin valve magnetoresistive (SVMR) sensor element would be rendered inoperable and unsatisfactory its intended purpose.

Thus, since applicant asserts that Sato may not properly be combined with Choukh to provide applicant's disclosed and claimed invention, since upon such combination Sato is rendered unsatisfactory for Sato's intended purpose, applicant asserts that none of applicant's claims to applicant's invention may properly be: (1) provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the '008 application in view of Sato and Choukh; (2) provisionally rejected under 35 U.S.C. § 103(a) as being unpatentable over the '008 application in view of Sato and Choukh; or (3) rejected under 35 U.S.C. § 103(a) as being unpatentable over Choukh and Sato, for reasons as cited by the Examiner.

In light of the foregoing response, applicant additionally respectfully requests that the Examiner's: (1) provisional rejections of claims 21-28 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over the '008 application in view of Sato and Choukh; (2) provisional rejections of claims 21-28 under 35 U.S.C. § 103(a) as being unpatentable over the '008 application in view of Sato and Choukh; and (3) rejections of claims 21-28 under 35 U.S.C. § 103(a) as being unpatentable over Choukh in view of Sato, be withdrawn.

***Other Considerations***

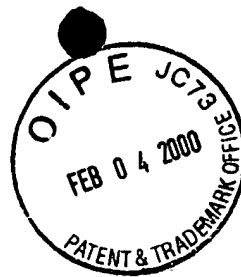
The Examiner has cited no additional prior of record not employed in rejecting applicant's claims to applicant's invention.

No fee is due as a result of this response.

**SUMMARY**

Applicant's invention as disclosed and claimed within claim 21 is directed towards a method for forming a transversely magnetically biased soft adjacent layer (SAL) magnetoresistive (MR) sensor element comprising a magnetoresistive (MR) layer separated from a soft adjacent layer (SAL) by a dielectric spacer layer, where there is formed contacting a side of the soft adjacent layer (SAL) opposite the dielectric layer a transverse magnetic biasing layer, and where at least one of the dielectric layer, the magnetoresistive (MR) layer, the soft adjacent layer (SAL) and the transverse magnetic biasing layer is a patterned layer formed employing an etch mask which serves as a lift-off stencil for forming a patterned second dielectric layer adjoining an edge of the patterned layer. The prior art of record employed in rejecting applicant's claims to applicant's invention may not properly be combined in a fashion as suggested by the Examiner to provide applicant's claimed invention insofar as such modification renders the prior art inoperable and unsatisfactory for its intended purpose.

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### CONCLUSION

On the basis of the above amendments and remarks, reconsideration of this application, and its early allowance, are respectfully requested.

Any inquiries relating to this or earlier communications pertaining to this application may be directed to the undersigned attorney at 914-471-0790 or Mr. George Saile, Esq. (Reg. No. 19,572) at 914-452-5863, at the Examiner's convenience.

Respectfully submitted,

A handwritten signature in cursive script, reading "Alek P. Szecsy".

Alek P. Szecsy (Reg. No. 37,949)

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